

Amendments to the Claims

Listing of Claims:

1-23. *(Canceled)*

24. *(Original)* A particle comprising a base having a shape of an inverted truncated right circular cone, wherein diameter of the inverted truncated right circular cone ranges from 1 nm to 100 microns, height of the inverted truncated right circular cone ranges from 5 nm to 1000 microns, and aspect ratio of the inverted truncated right circular cone ranges from 5 to 5000.

25. *(Original)* A particle according to claim 24, wherein the diameter ranges from 10 nm to 10 microns.

26. *(Original)* A particle according to claim 25, wherein the diameter ranges from 100 nm to 1 micron.

27. *(Original)* A particle according to claim 26, wherein height of the inverted truncated right circular cone ranges from 50 nm to 1000 microns.

28. *(Original)* A particle according to claim 27, wherein height of the inverted truncated right circular cone ranges from 5 nm to 1000 microns.

29. *(Original)* A particle according to claim 24, additionally comprising an at least partly semispherical head disposed atop the base.

30. *(Original)* A particle according to claim 24, additionally comprising a layered internal structure.

31. *(Original)* A particle according to claim 24, wherein said base is at least partly hollow.

32. **(Original)** A particle according to claim 24, comprising a material capable of forming one of a planar array, a two-dimensional lattice, or a nanotube.
33. **(Original)** A particle according to claim 32, wherein said material comprises carbon, hexagonal BN; B_xC_y , where x and y are independently 0, 1, 2, 3 or 4; $B_xC_yN_z$ where x, y and z are independently 0, 1, 2, 3 or 4; a dichalcogenide; a metal oxide; a metal boride; or a combination thereof.
34. **(Currently Amended)** A particle according to claim 33, further comprising carbon.
35. **(withdrawn)** A powder comprising particles having a shape of an inverted truncated right circular cone with a rounded top, wherein diameter of the cone ranges from 1 nm to 100 microns and height of the cone ranges from 5 nm to 1000 microns.
36. **(withdrawn)** A powder according to claim 34, wherein the diameter ranges from 10 nm to 10 microns.
37. **(withdrawn)** A powder according to claim 35, wherein the diameter ranges from 100 nm to 1 micron.
38. **(withdrawn)** A powder according to claim 34, additionally comprising a layered internal structure.
39. **(withdrawn)** A powder according to claim 34, wherein said particles are at least partly hollow.
40. **(withdrawn)** A powder according to claim 34, comprising carbon, hexagonal BN; B_xC_y , where x and y are independently 0, 1, 2, 3 or 4; $B_xC_yN_z$ where x, y and z are independently 0, 1, 2, 3 or 4; a dichalcogenide; a metal oxide; a metal boride; or a combination thereof.

41. *(withdrawn)* A powder according to claim 40, comprising MoS₂, WS₂, V₂O₅, MoO₃, MgB₂ or a combination thereof.

42. *(Original)* A particle according to claim 34, comprising MoS₂, WS₂, V₂O₅, MoO₃, MgB₂ or a combination thereof.